Lambert conformal conic projection with two standard parallels
Plane coordinate projection tables

Ellipsoidal constants

a = 6378137 m
f = 1/298.257222101

Defining constants

ϕ_b = 36°40′ (latitude of grid origin)
λ_o = 105 30 (longitude of origin and Central Meridian, CM)
ϕ_s = 37 14 (southern standard parallel)
ϕ_n = 38 26 (northern standard parallel)
E_o = 914401.8289 m (easting coordinate of origin)
N_b = 304800.6096 m (northing coordinate of origin)

Derived constants

ℓ = 0.613378042371 = $\sin(\phi_o)$
K = 12711335.3256 m (mapping radius at the equator)
R_b = 8352015.4059 m (mapping radius at grid origin)

Lambert coordinates (N,E) from geodetic positions (ϕ,λ)

$\gamma = (\lambda_{CM} - \lambda) \sin(\phi_o)$ (γ is the meridional convergence)
$E = R \sin(\gamma) + E_o$ (R from table)
$N = R_b - R \cos(\gamma) + N_b$

Station	Latitude Longitude	R γ	Sin(γ) Cos(γ)	E N
Sample 1	37 50 00.00000 106 00 00.00000	8222534.181 m -0 18 24.08048	-0.0053527076 0.9999856742	870389.007 m 434399.630 m

Geodetic positions from Lambert coordinates

$\tan(\gamma) = (E - E_o)/((R_b - (N - N_b))$
$R = (R_b - (N - N_b))/\cos(\gamma)$
$\lambda = \lambda_{CM} - \gamma/\ell$
ϕ from table using R

Station	E N	E - E_o R_b-(N - N_b)	R γ	Latitude Longitude
Sample 2	964401.829 m 434800.610 m	50000.000 m 8222015.406 m	8222167.4354 m 0 20 54.32910	37 50 11.8958 104 55 55.0473

WARNING: Use sufficient significant digits for trig.functions

Lat	R (meters)	tab diff.	k
36°40	8352015.406	30.83000	1.00015106
36 41	8350165.606	30.82991	1.00014524
36 42	8348315.811	30.82982	1.00013951
36 43	8346466.022	30.82973	1.00013386
36 44	8344616.238	30.82965	1.00012830
36 45	8342766.459	30.82957	1.00012281
36 46	8340916.685	30.82949	1.00011741
36 47	8339066.916	30.82941	1.00011209
36 48	8337217.151	30.82934	1.00010686
36 49	8335367.390	30.82927	1.00010171
36 50	8333517.634	30.82920	1.00009664
36 51	8331667.882	30.82914	1.00009166
36 52	8329818.134	30.82907	1.00008675
36 53	8327968.390	30.82901	1.00008193
36 54	8326118.649	30.82895	1.00007720
36 55	8324268.912	30.82890	1.00007255
36 56	8322419.178	30.82885	1.00006798
36 57	8320569.447	30.82880	1.00006349
36 58	8318719.719	30.82875	1.00005909
36 59	8316869.995	30.82870	1.00005477
37 0	8315020.272	30.82866	1.00005054
37 1	8313170.553	30.82862	1.00004639
37 2	8311320.836	30.82858	1.00004232
37 3	8309471.121	30.82855	1.00003833
37 4	8307621.408	30.82852	1.00003443
37 5	8305771.697	30.82849	1.00003061
37 6	8303921.988	30.82846	1.00002688
37 7	8302072.280	30.82843	1.00002322
37 8	8300222.574	30.82841	1.00001966
37 9	8298372.869	30.82839	1.00001617
37 10	8296523.166	30.82838	1.00001277
37 11	8294673.463	30.82836	1.00000945
37 12	8292823.761	30.82835	1.00000622
37 13	8290974.060	30.82834	1.00000307
37 14	8289124.360	30.82834	1.00000000
37 15	8287274.659	30.82833	0.99999702
37 16	8285424.959	30.82833	0.99999412
37 17	8283575.260	30.82833	0.99999130
37 18	8281725.560	30.82834	0.99998857
37 19	8279875.859	30.82834	0.99998592

Lat	R (meters)	tab diff.	k
37°20′	8278026.159	30.82835	0.99998335
37 21	8276176.458	30.82836	0.99998087
37 22	8274326.756	30.82838	0.99997847
37 23	8272477.053	30.82840	0.99997616
37 24	8270627.349	30.82842	0.99997393
37 25	8268777.644	30.82844	0.99997178
37 26	8266927.938	30.82846	0.99996972
37 27	8265078.230	30.82849	0.99996774
37 28	8263228.521	30.82852	0.99996585
37 29	8261378.809	30.82855	0.99996404
37 30	8259529.096	30.82859	0.99996231
37 31	8257679.381	30.82863	0.99996066
37 32	8255829.663	30.82867	0.99995910
37 33	8253979.943	30.82871	0.99995763
37 34	8252130.221	30.82876	0.99995624
37 35	8250280.495	30.82880	0.99995493
37 36	8248430.767	30.82885	0.99995371
37 37	8246581.036	30.82891	0.99995257
37 38	8244731.301	30.82896	0.99995151
37 39	8242881.564	30.82902	0.99995054
37 40	8241031.822	30.82908	0.99994965
37 41	8239182.077	30.82915	0.99994885
37 42	8237332.328	30.82921	0.99994813
37 43	8235482.576	30.82928	0.99994749
37 44	8233632.819	30.82935	0.99994694
37 45	8231783.057	30.82943	0.99994647
37 46	8229933.291	30.82951	0.99994609
37 47	8228083.521	30.82959	0.99994579
37 48	8226233.746	30.82967	0.99994558
37 49	8224383.966	30.82975	0.99994544
37 50	8222534.181	30.82984	0.99994540
37 51	8220684.390	30.82993	0.99994544
37 52	8218834.595	30.83002	0.99994556
37 53	8216984.793	30.83012	0.99994577
37 54	8215134.986	30.83022	0.99994606
37 55	8213285.173	30.83032	0.99994643
37 56	8211435.354	30.83042	0.99994689
37 57	8209585.529	30.83052	0.99994743
37 58	8207735.698	30.83063	0.99994806
37 59	8205885.860	30.83074	0.99994878

Lat	R (meters)	tab diff.	k
38° 0′	8204036.015	30.83086	0.99994957
38 1	8202186.164	30.83097	0.99995045
38 2	8200336.305	30.83109	0.99995142
38 3	8198486.440	30.83121	0.99995247
38 4	8196636.567	30.83134	0.99995361
38 5	8194786.687	30.83146	0.99995483
38 6	8192936.799	30.83159	0.99995613
38 7	8191086.903	30.83172	0.99995752
38 8	8189237.000	30.83186	0.99995899
38 9	8187387.088	30.83200	0.99996055
38 10	8185537.169	30.83214	0.99996219
38 11	8183687.240	30.83228	0.99996392
38 12	8181837.304	30.83242	0.99996573
38 13	8179987.358	30.83257	0.99996763
38 14	8178137.404	30.83272	0.99996961
38 15	8176287.441	30.83287	0.99997168
38 16	8174437.468	30.83303	0.99997383
38 17	8172587.487	30.83319	0.99997606
38 18	8170737.495	30.83335	0.99997838
38 19	8168887.495	30.83351	0.99998079
38 20	8167037.484	30.83368	0.99998328
38 21	8165187.463	30.83385	0.99998585
38 22	8163337.433	30.83402	0.99998851
38 23	8161487.392	30.83419	0.99999126
38 24	8159637.340	30.83437	0.99999409
38 25	8157787.278	30.83455	0.99999700
38 26	8155937.205	30.83473	1.00000000
38 27	8154087.122	30.83491	1.00000308
38 28	8152237.027	30.83510	1.00000625
38 29	8150386.921	30.83529	1.00000951
38 30	8148536.804	30.83548	1.00001285
38 31	8146686.675	30.83568	1.00001627
38 32	8144836.534	30.83587	1.00001978
38 33	8142986.382	30.83607	1.00002338
38 34	8141136.217	30.83628	1.00002706
38 35	8139286.041	30.83648	1.00003082
38 36	8137435.852	30.83669	1.00003467
38 37	8135585.650	30.83690	1.00003861
38 38	8133735.436	30.83711	1.00004263
38 39	8131885.209	30.83733	1.00004673

Lat	R (meters)	tab diff.	k
38°40′	8130034.969	30.83755	1.00005093
38 41	8128184.716	30.83777	1.00005520
38 42	8126334.450	30.83799	1.00005956
38 43	8124484.171	30.83822	1.00006401
38 44	8122633.877	30.83845	1.00006854
38 45	8120783.570	30.83868	1.00007316
38 46	8118933.249	30.83892	1.00007786
38 47	8117082.914	30.83915	1.00008265
38 48	8115232.565	30.83939	1.00008753
38 49	8113382.202	30.83964	1.00009249
38 50	8111531.823	30.83988	1.00009753
38 51	8109681.430	30.84013	1.00010266
38 52	8107831.023	30.84038	1.00010788
38 53	8105980.600	30.84063	1.00011318
38 54	8104130.162	30.84089	1.00011857
38 55	8102279.709	30.84115	1.00012404
38 56	8100429.240	30.84141	1.00012960
38 57	8098578.755	30.84167	1.00013524
38 58	8096728.255	30.84194	1.00014097
38 59	8094877.739	30.84221	1.00014679
39 0	8093027.206	30.84248	1.00015269